Quick Summary: This section provides a set of design guidelines for best practices to make Hertford more pedestrian-friendly.

Section 6. Design Guidelines and Standards

6.1. Introduction

This section provides guidance for the Town of Hertford as they construct new pedestrian facilities and reconstruct existing pedestrian facilities to meet better standards. This section is divided into the following topics:

- legal rights of pedestrians
- pedestrian facilities and their design
  - sidewalks
  - crossings: signalized or unsignalized
  - greenways
- ADA requirements
- downtown area standards
- school standards
- sidewalk construction policy and maintenance
- parking lots

This section of the Plan is important because it provides a consistent set of guidelines within the Town to help create a uniform appearance to Hertford's sidewalks and a more connected system.

6.2. Legal Rights of Pedestrians

It is important to understand the legal rights of pedestrians because these guide and define how pedestrian facilities are constructed and provided. Some of the legal rights of pedestrians are defined in Sections 20-172 through 20-175.2 of the North Carolina General Statutes. Some of the items which should be considered are the following:

- Drivers must yield to pedestrians (or cyclists) crossing a driveway, alley exit, or parking garage exit on a sidewalk. (§20-173)
- Pedestrians crossing any roadway other than at a marked crosswalk must yield to vehicles.
- Pedestrians should cross at street intersections or in marked crosswalks.
- If there are sidewalks, pedestrians are not to walk in the roadway. Where sidewalks are not provided, any pedestrian walking along the roadway will walk to the extreme left, facing in the direction of approaching traffic.
- Every driver must consider pedestrians at all times, especially exercising care in the presence of children or incapacitated persons on the roadway. (§20-174)
- Special emphasis on leaving adequate crossing room at intersections is noted for visually handicapped persons. (§20-175.2)

More information can also be found in the NC Bike/Pedestrian Laws Guidebook, available at the NCDOT's Division of Bicycle and Pedestrian Transportation webpage: http://www.ncdot.org/transit/bicycle/laws/resources/BikePedLawsGuidebook-Part-1.pdf.

In addition, pedestrian access is also governed by the requirements of the Americans with Disabilities Act of 1990, a civil rights law which prohibits discrimination against people with disabilities in all aspects of life. As done throughout the US, Hertford must provide transportation facilities, including sidewalks and other pedestrian facilities, which comply with the guidelines set forth in the ADA Accessibility Guidelines (ADAAG) in order to meet the standards of the American Disabilities Act. Some of the major items related to pedestrian facilities that are addressed by ADAAG include curb ramps and cross-slopes. The following bullets describe ADAAG-compliant design for these items:

- **Curb ramps: design and placement.**
  - *DESIGN:* Curb ramps are a significant and required feature of accessible pedestrian transportation systems, and must be designed carefully to fulfill their function and the requirements of the Americans with Disabilities Act. Curb ramps should not have a slope greater than 1:12, meaning that for every foot of travel, the slope should not rise more than one inch. To provide a tactile warning to the visually impaired, raised truncated domes with a color contrast to the background material (typically concrete) should be used, with measurements shown in Figure 6-1.i The *ADA Accessibility Guidelines for Buildings and Facilities* (http://www.access-board.gov/adaag/html/adaag.htm#A4.29.2) has an easy-to-use format for locating specific design criteria related to curb ramps, rise/run restrictions on ramps, and figures illustrating basic concepts.[ii]
  - *PLACEMENT:* Curb ramps should be placed entirely within the area of a marked crosswalk, so that a pedestrian can enter the ramp space at an angle perpendicular to the direction of travel. Generally, the standard is to have separate curb ramps on each corner; if a shared (sometimes called corner or diagonal) curb ramp is constructed, then the width and radius should accommodate the user so that entry onto the ramp is parallel to the direction of travel. Figure 6-2 provides examples of the acceptable relationship between crosswalk and curb ramp location/widths.

- **Cross-Slopes.** Cross-slopes, or a slope along the travelway surface which is perpendicular to the direction of travel, can often make it very difficult for wheelchair travel. In addition, it can also make for treacherous walking conditions for individuals with problems with their balance and coordination. Cross-sloping most frequently occurs in conditions in which a driveway meets a sidewalk, but can also occur in other

situations. In order to minimize the risk of a dangerous and difficult travel condition for some, cross-sloping is regulated by ADAAG such that cross-slopes should not exceed two percent, and preferably not exceed 1.5 percent where possible. Figure 6-3 indicates the preferred (top), conditionally acceptable (middle), and unacceptable (bottom) design solutions for new driveways as they interface with sidewalks.

For a complete guide to ADA requirements, please see the National Access Board's website: www.access-board.gov.

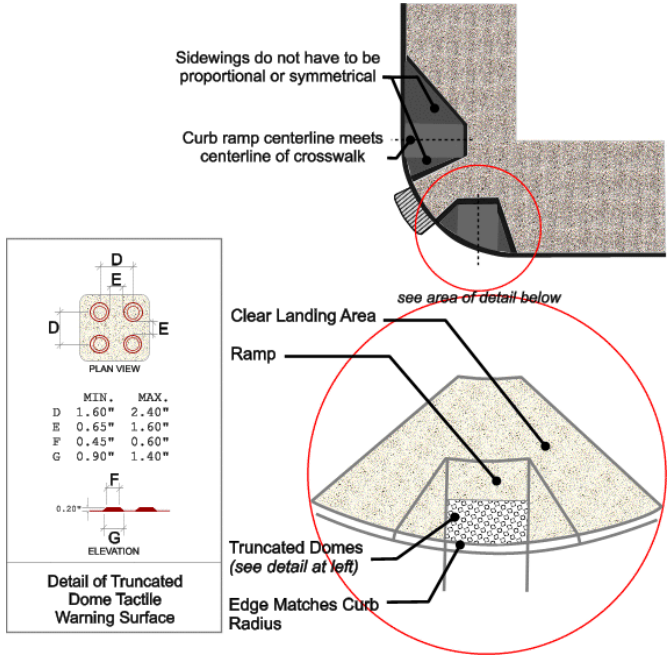


Figure 6-1. Detail of an ADA-compliant curb ramp design with truncated dome measurements.

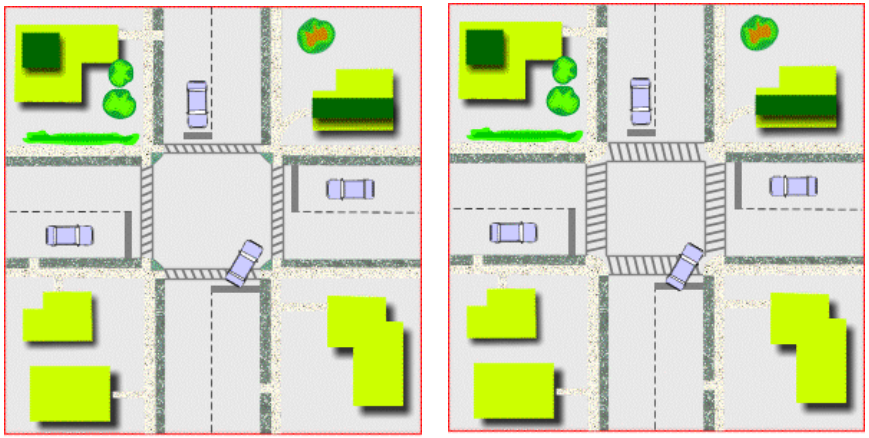
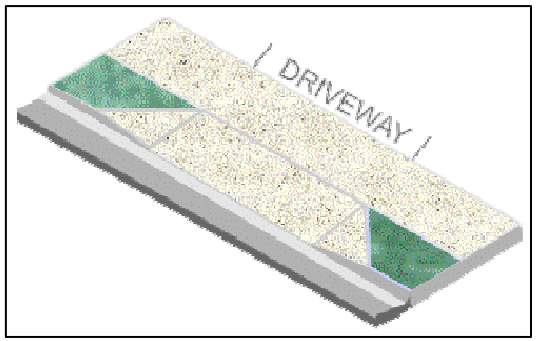
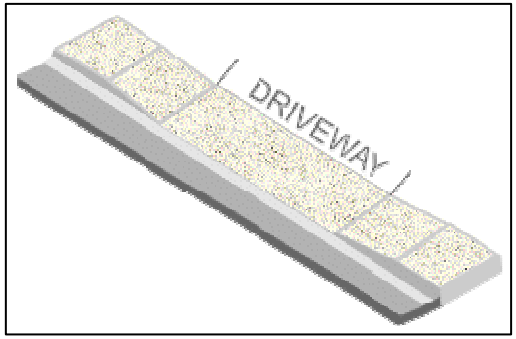


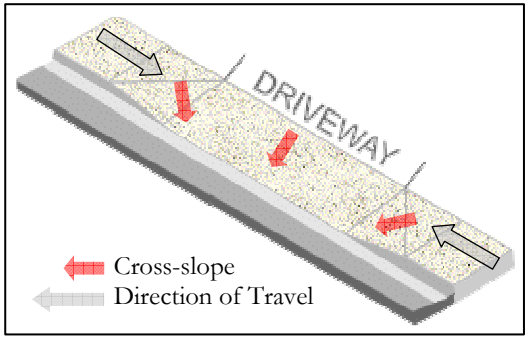
Figure 6-2. Drawing of appropriate curb ramp placements. In each image, the curb ramps are located completely within the crosswalk limits.



Preferred – *The sidewalk is set behind the driveway apron and planting strip.*



Conditionally Acceptable – *The "dip" at the driveway apron allows for safer passage with no cross-slope.*



Not Acceptable – *The cross-slope at the driveway apron provides a difficult challenge for a person using a wheelchair or cane.*

Figure 6-3. Examples of acceptable and unacceptable design solutions for minimizing cross-sloping at a driveway and sidewalk interface.

6.3. Pedestrian Facilities and their Design

There are a variety of sources for design guidance for pedestrian facilities, including the following:

- NCDOT (Draft, 1997)
- The American Association of State Highway and Transportation Officials' *Guide for the Planning, Design, and Operation of Pedestrian Facilities* (AASHTO, 2004)
- Manual on Uniform Traffic Control Devices (MUTCD), frequently updated
- Federal Highway Administration (FHWA)

The North Carolina Department of Transportation adheres to the design guidelines provided in the AASHTO and MUTCD guidebooks. In general, pedestrian facilities can be described in the following categories:

- sidewalks
- crossings
- greenways

The Town currently does not have its own standards for pedestrian facilities. The following paragraphs provide national standards and best practices for pedestrian facilities by category.

6.3.1. Sidewalks

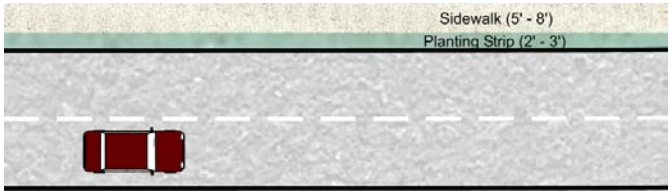
Standard sidewalk is usually five feet minimum in width, concrete, and placed along roadways with curb and gutter. In general, the width of sidewalks should accommodate two persons walking past one another, a width generally recognized to be five feet, at a minimum. Other circumstances that may require additional sidewalk width are: (1) to accommodate the overhang of parked vehicles from off-street or angled on-street parking areas; and (2) additional buffer from traffic when a planting strip cannot be installed.

Additional design considerations for on-street sidewalk facilities include the following:

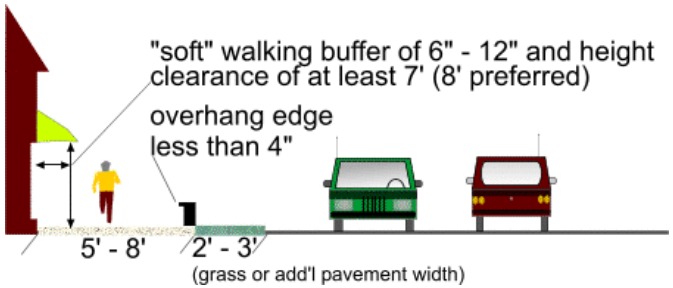
- Eliminating both high and low contact points with tree branches, mast-arm signs, overhanging edges of amenities or furniture, and
- Providing clear space between walls on one side of the walkway and amenities, parking overhang, or plantings on the curb side of the walkway (see Figure 6-4 which diagrams the relationships between pedestrian features, building facades, and roadway).

In general, standard sidewalks should be concrete, which is more durable than asphalt. A more flexible material, such as rubberized paving, can be considered in situations in which there is the

potential for tree roots to crack and lift the concrete. Using these types of materials can reduce the risk of a tripping hazard, and also lower maintenance costs. More permeable materials, such as porous pavers, can also be considered for all pedestrian-ways, and in particular for greenways near streams, in order to reduce run-off from storm events. Caution should be used to consider total, lifecycle costs for alternative materials. For example, porous pavements are more expensive initially to install, but will also usually lose their porosity if the air spaces in the pavement are not regularly cleaned.



Plan View of Sidewalk, Buffer, Street.



Profile View of Sidewalk, Buffer, Street.

Figure 6-4. A diagram of the relationship between pedestrian features, building facades, and the roadway.

Figure 6-5. Examples of pedestrian-activated signalized mid-block crossings. Top image: An example of a pedestrian-activated signalized mid-block crossing. **Bottom image:** An at-site guide for pedestrians to assist them in understanding the meaning of the push-button signals.

6.3.2. Crossings

Crossings are a critical feature in a well-connected pedestrian system because they provide the linkages between one segment of sidewalk to another as a pedestrian may cross a street, connect to another existing piece of sidewalk, or pass to a new development. A well-placed crossing can dramatically reduce pedestrian travel time and improve pedestrian safety – greatly increasing the convenience of walking as a mode of travel. Crossings can be both signalized and unsignalized, as well as located at intersections or at mid-block locations.

There are a variety of designs for unsignalized crossings, including striped crosswalks, zebra crosswalks, and raised platform crosswalks. There are also a variety of designs for signalized crossings, including:

- Pedestrian Signals and crosswalks
- Pedestrian Signals, crosswalks, and audible signals
- Pedestrian Signals, crosswalks, and countdown signals
- High Intensity Activated Crosswalk (HAWK) Signal

It is recommended that for all signalized intersections in the Town, the Town should have signals for pedestrians. In the Downtown area, pedestrian signals should include audible and visible cues and perhaps even countdown displays.

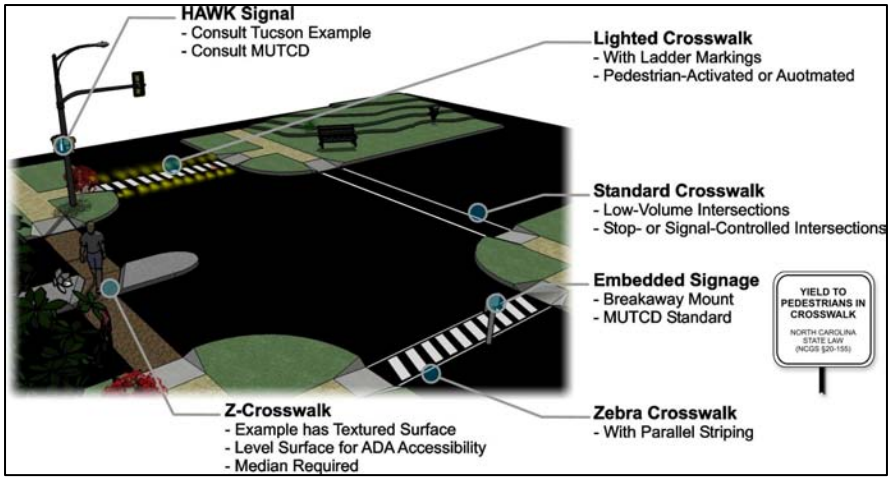


Figure 6-6. A diagram of various crossing treatments Hertford can consider to improve pedestrian accessibility and safety crossing the street.

While no mid-block crossings have been proposed in this Plan, standards and guidelines are provided should a certain condition or situation arise where this type of crossing would be suitable. For mid-block crossings, there is still no national consensus for when a crossing should be created mid-block, and when the mid-block crossing should be signalized. The City of Charlotte Department of Transportation has created a set of guidelines for assessing mid-block crossings, based in part on the work of FHWA and Charles Zegeer of the Pedestrian and Bicycle Information Center. In addition to numbers of pedestrians, vehicle speed, and vehicle volume on the roadway, there are a variety of other considerations which must be accounted for when determining whether to construct a mid-block crossing. These considerations include: lighting conditions, sight distance, numbers of lanes, and roadway width. Figure 6-7 shows the "solution space" identified by the City of Charlotte for considering a mid-block crossing. Table 1 shows the decision matrix created by the City of Charlotte for determining when to construct a mid-block crossing and identifying appropriate treatments.

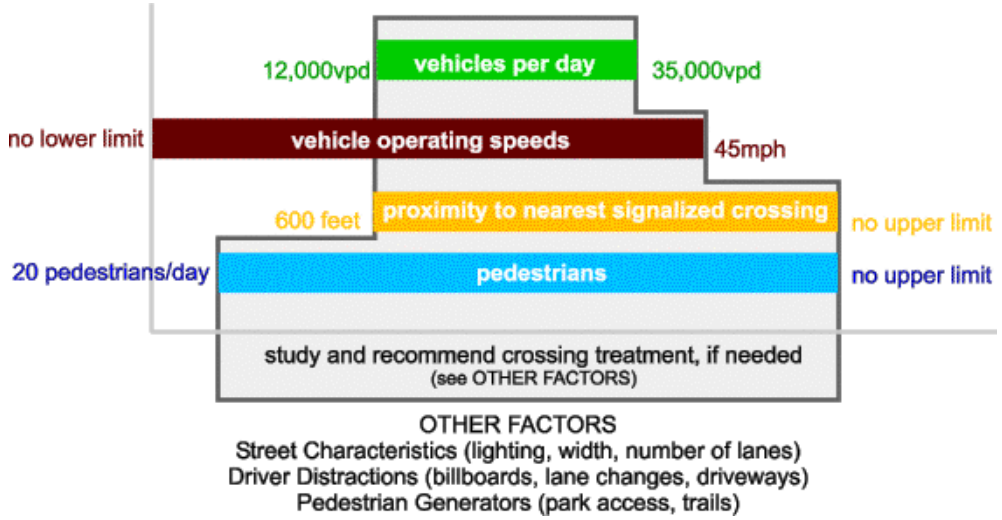


Figure 6-7. The City of Charlotte's solution space for considering when to apply signalized mid-block pedestrian crossings.
Source: Charlotte Department of Transportation

Table 6-1. Mid-Block Crossing Treatment Design Criteria (*Charlotte DOT, 2005*).
**Note: MUTCD recommends pedestrian volumes of at least 400 for a four-hour period. **A HAWK (High-Intensity Activated Crosswalk) signal is a pedestrian-activated system used for high-volume crossings found to be useful in increasing the rate of driver responses to pedestrian crossings, especially in Tucson, AZ where they have been utilized extensively.*[iii]

Pedestrian Mid-block Crossing Treatment	AADT	Operating Speed	Approx. Cost
Signs	5,000 – 35,000	Less than 45 mph	$250 - 350
High-Visibility Markings	5,000 – 12,000	Less than 35 mph	$500 – 1,500
Colored and Textured Markings	5,000 – 12,000	Less than 35 mph	$5,000+
Curb Extensions	5,000 – 12,000	Less than 35 mph	$5,000 – 25,000
Raised Crosswalks	5,000 – 15,000	Less than 30 mph	$2,000 – 15,000
Refuge Island	12,000 – 30,000	Less than 40 mph	$10,000 – 40,000
Median	15,000 – 35,000	35 - 45 mph	Varies greatly
In-Pavement Illumination	5,000 – 15,000	Less than 35 mph	$40,000
Pedestrian-Only Signal*	15,000 – 35,000	35 – 45 mph	$40,000 – 75,000
HAWK Signal**	15,000 – 35,000	35 – 45 mph	$35,000 – 60,000

Given the sensitive nature of mid-block crossings, every new mid-block crossing treatment will require a specific investigation by the Town prior to initiating design and construction. In spite of this, mid-block treatments can be useful in improving safety in areas with fairly high pedestrian crossings and low numbers of vehicles and vehicle speeds, if located and designed properly.

6.3.3. Signage

In addition to sidewalks and crossings, pedestrian facilities also include signage along major pedestrian routes. Signs serve primarily to notify motorists and others of the presence of pedestrians. The intended effect is to cause motorists drive more cautiously and reduce their speeds, thereby improving the safety for pedestrians in the given area.

Signs can be used in a variety of places, including at crosswalks, at intersections, in-street, and near schools. National standards for sign placement and use can be found in the Manual for Uniform Traffic Control Devices (MUTCD). The MUTCD provides guidance for warning signs which can be used at both crosswalks, or along the roadway:

"Nonvehicular signs may be used to alert road users in advance of locations where unexpected entries into the roadway or shared use of the roadway by ***pedestrians***, animals, and other crossing activities might occur." (Page 2C – 21, 2003 Edition)

The following are some recommended signs which Hertford should consider installing. For more signs and more detailed guidelines for sign installation and use, Hertford should consult the MUTCD.

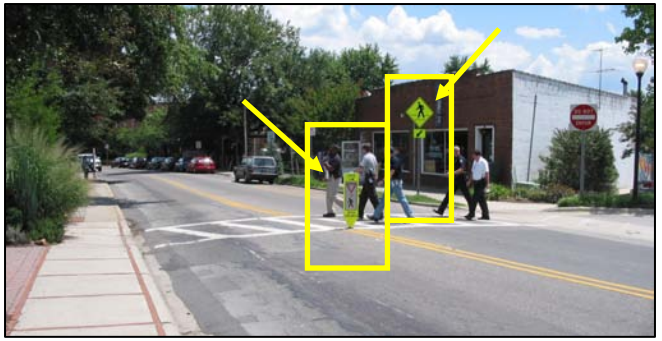


Figure 6-8. An example of two types of signs used to notify motorists of a pedestrian crossing.

Figure 6-9. Example standard pedestrian warning signs. The first sign is usually installed within the street to warn motorists to yield to pedestrians in a crosswalk - it does not have to be near a school. The second and third signs are common general pedestrian warning signs, while the fourth and fifth signs notify motorists of specific instances to watch for pedestrians. The fourth sign, "Turning Traffic", is usually placed at intersections to warn motorists that are turning right or left to yield to pedestrians in crosswalks. For the fifth sign, the top sign can either be combined with the smaller "ahead" sign or the arrow symbol to indicate the presence of a crosswalk to motorists in a school zone. The signs at far right are examples of typical wayfinding signage to help direct cyclists at major decision points along a route.

6.3.4. Greenways

Greenways, sometimes also called multi-use trails, are one of the most popular pedestrian facilities, especially for recreation. Greenways can be both paved or unpaved paths, often unassociated with a roadway. They can be used by pedestrians, cyclists, and other non-motorized users. Greenways are typically no less than 10 feet wide and asphalt if paved. Figure 6-10 provides a diagram of a general greenway design.

Additional guidance on greenway design and standards can be found at:
www.ncdot.org/transit/bicycle/projects/project_types/Multi_Use_Pathways2.pdf

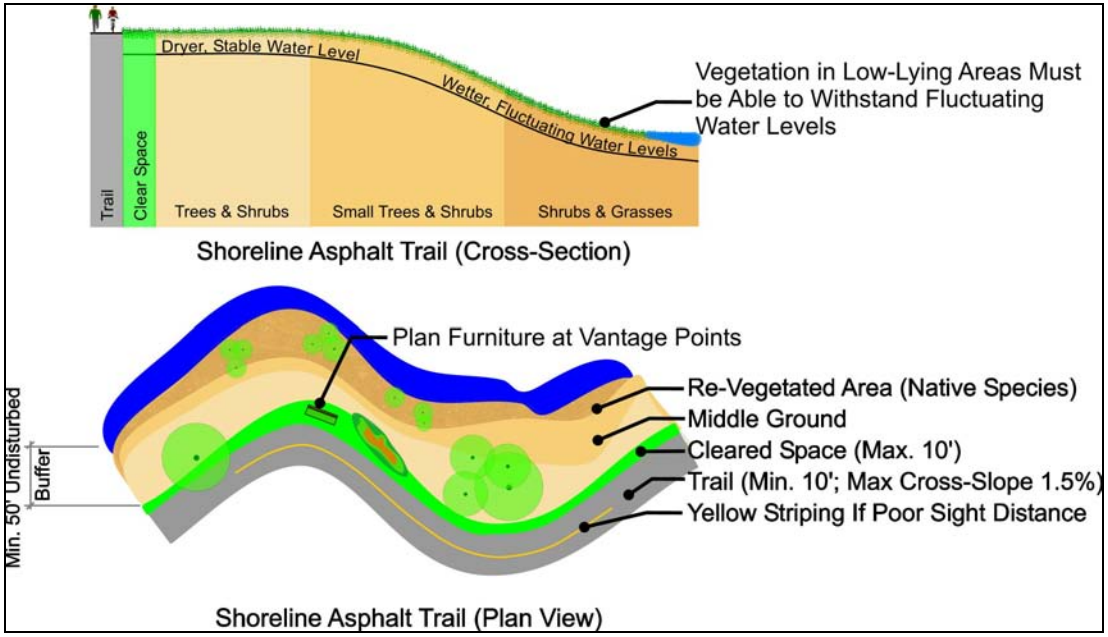


Figure 6-10. A diagram of general greenway design near to a coastal shoreline.

6.4. Downtown Area Standards

Downtown Hertford is already one of the most pedestrian-friendly areas in the Town. In order to maintain its pedestrian-oriented nature, and also to enhance the area's attractiveness and visual appeal, the Downtown area should have certain standards which may or may not be required beyond the downtown area. Some of these recommendations are as follows:

- **Maintain and require theme as outlined in Historic Hertford Plan.** The Historic Hertford Plan has outlined specific themes for brick sidewalk design, streetlights, and wayfinding signage in Hertford. The Pedestrian Plan supports this theme and recommends that it should be maintained throughout downtown and required whenever new sidewalk is constructed. Figure 6-11 shows an example of this brick and concrete theme.
- **Provide wide sidewalk.** New sidewalk, or reconstructed sidewalk, should be kept at a minimum of five feet and between five and ten feet, if not wider, in the downtown area. This width is necessary to accommodate the numbers of pedestrians expected in a Town such as Hertford which can have many visitors. Pedestrians need space to window shop, stroll, walk side-by-side with their families, and even stop for a rest in the sidewalk space. The Town should also consider accommodating restaurants or cafes interested in creating outdoor, on-street seating, which is often a major booster to making a street look more popular and pedestrian-friendly. It also attracts even more visitors and potential shoppers and diners.
- **Provide many pedestrian amenities.** In addition to sidewalk width, the Town should also provide pedestrian amenities such as benches, trash cans, and water fountains to make walking in downtown more comfortable for the numerous visitors that come to Hertford each year. The Town should even consider adding street trees or other means for shade. The more pedestrian amenities available in a particular area, the more inviting the area for pedestrians and visitors.
- **Provide frequent pedestrian crossings.** In order to maintain the accessibility of the downtown area, crosswalks should be required at various intervals along major streets that are uninterrupted by intersections.
- **Require pedestrian signals with audible and visible signals as well as countdown displays at all intersections.** Pedestrian signals should be required with audible and visible signals at all intersections, especially within the downtown area. The Town may also wish to consider pedestrian signals with countdowns in order to assist with safer crossings.

Figure 6-11. A view of Church Street in downtown Hertford. The arrow indicates where the sidewalk has been treated with a brick and concrete theme.

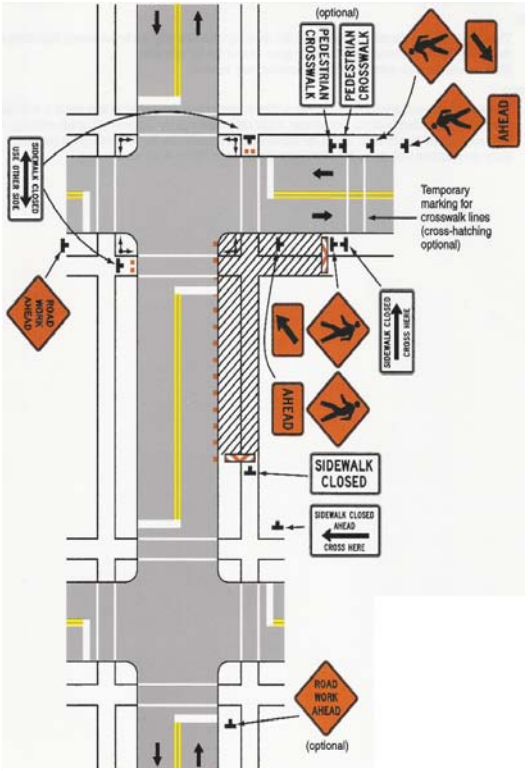


Figure 6-12. A sample signage plan to assist pedestrians using detours in construction zones. Adapted from Sample Signage Plan for Temporary Pedestrian Closure (MUTCD, Figure 6H - 29).

6.5. Schools

In addition to downtown, another area in Hertford that merits special treatment is the area around schools. Schools require special treatment because of the presence of both children and very high levels of traffic during drop-off and pick-up. Especially during drop-off and pick-up, traffic near schools can be heavy and incredibly varied - consisting of small and large personal vehicles, school and other activity buses, pedestrians, and cyclists. Specific design features should be required around schools to improve safety for all in the area. Some of these design features include:

- Requiring sidewalks on both sides of the street;
- Placing crosswalks and pedestrian signals at all intersections near the school;
- Reducing speed limits along adjacent streets; and
- Providing signage to warn drivers of the school's presence and the potential for children in the street.

6.6. Construction Zones

Given the pressure for more development in Hertford, the Town anticipates that there will be more construction in the future. It is important that during this construction, convenient and safe pedestrian access to destinations remain open and accessible. During the construction or expansion of private development, as well as roadways and utilities, the entity responsible for the construction is also responsible for providing adequate pedestrian access through or around the site as well as signage that provides advance warning to pedestrians and motorists of the closure. Both the MUTCD (Manual on Uniform Traffic Control Devices)[iv], NCDOT's Planning and Designing Local Pedestrian Facilities[v], and the ADA (Americans with Disabilities Act)[vi] stipulate that safe passage should be maintained throughout a temporary closure unless it occurs during an extreme situation such as a natural or man-made emergency. During private construction within Town limits, it is the responsibility of the Town of Hertford to ensure compliance with these rules by regular monitoring.

The following should be considered whenever a sidewalk or trail will be closed temporarily:

- *Accessibility for Mobility Impaired Citizens.* At least one accessible route should be provided to transportation or transit facilities; accessible parking areas/spaces; public streets/sidewalks; and public parking areas to an accessible entrance of the building. This route(s) will comply with all other accessibility provisions contained in the ADA regardless of whether they are temporary or permanent. A barrier shall be placed across the full width of the sidewalk or trail to be detectable by a visually impaired person using a cane. An audible information device may be needed in cases where there are especially high traffic volumes challenging a visually impaired person making a street crossing.

- *Temporary Obstructions.* Parked construction equipment, erosion control fencing, storage of materials/construction debris, and other potential obstructions should be kept away from roadside pedestrian access and pedestrian or multi-use trails so as to keep a permanent passageway open for pedestrians crossing the site. Signs and other devices should not protrude more than 4" into the pedestrian passageway and 7' or less above a sidewalk (8' min. preferred).
- *Advance Warning and Signage.* Advance warnings may consist of a single sign to a flashing strobe, depending on the nature of the construction or context (such as vehicular volumes) of the work area. Advance signage should be placed so that pedestrians have an opportunity to read the sign and make a safe crossing at a street intersection to the opposite side of the roadway. Smaller, mid-block closures will require fewer treatments, but will still retain the "Sidewalk Closed Ahead Cross Street" advance warning at an appropriate and safe crossing point in advance of the closure, at a minimum.
- *Route Design.* Temporary traffic barriers like jersey barriers (although not intermittent short sections of jersey barriers) and breakaway bollards should be considered as tools to help delineate a buffer from moving vehicles in areas with high pedestrian traffic volumes and/or to help ensure worker safety.

Figure 6-13. Poor pedestrian access at a construction site in Cary, NC.

6.7. Parking Lot Design

Everyone becomes a pedestrian once they park their car, but there are many examples of poor parking lot design. Poor parking lot design at the least will deter customers that may be walking or riding transit to a store, and at the most can create a dangerous safety hazard by increasing pedestrian-vehicle interaction. The most common design issue is that the primary carriageway for vehicles in the parking lot happens to coincide with where the greatest number of pedestrians cross: directly in front of the main entrance. Other issues include poor sight lines to spot pedestrians; bad transition areas from the public domain (e.g., streets) to the private parking area; and inconvenient pedestrian access between parking areas, shops, and adjacent communities. Figure 6-14 indicates a preferred set of suggestions to overcome these common problems. The larger the parking lot, the more vehicles and pedestrians, and therefore the more important it is to carefully design treatments to minimize vehicle-pedestrian interaction. Some suggested treatments:

1. **Parking in the rear.** One way to attract pedestrians to a store and to reduce pedestrian-vehicle interaction is to minimize the amount of parking lot that a pedestrian must walk through to get to the store entrance. This can be done by placing parking in the rear which will reduce travel time for pedestrians approaching the store from the street-front and sidewalk. It will also minimize pedestrian-vehicle interaction by keeping pedestrian customers

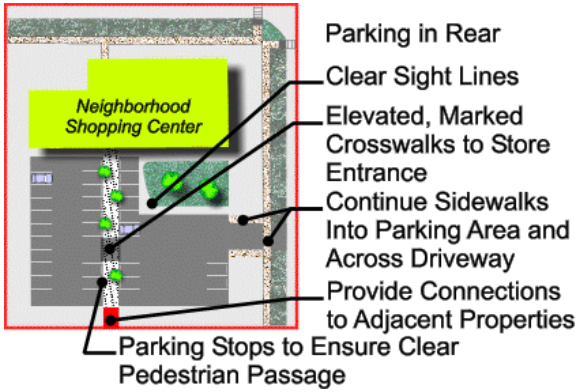


Figure 6-14. An example of pedestrian-friendly parking lot design.

separate from vehicles by allowing the pedestrian customers to access the store directly from the sidewalk rather than through a parking lot. Parking lots in the rear also create a more attractive streetscape – something that also encourages pedestrian use.

2. **Create safe "landing areas".** Provide continuous transitions from the street into a safe "landing" area in the parking lot; don't just "dump" pedestrians into the throat of a driveway.
3. **Maintain good sight lines** at major turning points inside the parking area.
4. **Provide well-marked pedestrian access perpendicular to store fronts.** Whenever possible, provide perpendicular pedestrian access into the front of a high volume land use such as major retail uses. The final crossing to the store entrance(s) should be well-marked, preferably with a raised crosswalk and/or colored demarcations to provide good visual cues to the driver. Moving the main parking aisle away from the principal entrance is another option.
5. **Supply adequate, pedestrian-scale lighting.** Adequate lighting is often perceived as a personal security issue in many large parking areas, and should be provided while avoiding disabling glare (looking into a direct light source and being partially blinded) or causing light pollution to adjoining properties. In order to make customers and pedestrians feel more comfortable, lighting should also be provided at a pedestrian scale. This means lowering the height of some light poles and providing lighting at key locations, such as the entrances and exits to stores, and not just in the parking lots.
6. **Provide awnings.** Especially for some "big box" stores, it is important that the transition for customers from inside the store to the outside be gradual and protected as much as possible from conflicts with vehicles. By providing awnings, a store protects its customers from the rain while allowing for a more comfortable pedestrian environment for customers to window shop and wait for rides or a bus to arrive. This can make a store seem much more comfortable while encouraging customers to remain within the protected awning area and out of conflict with vehicles in the travelway.

Hertford has several shopping centers and areas with large parking lots, and others may be on the way. It is important that the Town keep the pedestrian's access and safety in mind when reviewing development proposals. Through better design and better design review, the Town will be able to create parking lots that are both convenient for a car and comfortable for a pedestrian.

6.8. Traffic Calming Considerations

Traffic calming is the term used to describe a toolbox of improvements that can be used to "calm", or slow, traffic along a street, usually in a neighborhood or similar area with low traffic speeds and relatively lower traffic volumes. Although not directly pedestrian-related, traffic calming efforts can help to create a safer, more comfortable pedestrian environment by reducing

vehicle speeding. Traffic calming comes in a variety of forms. Some of the most common techniques are described in the paragraphs below.

6.8.1. Curb Extensions (Bulb-Outs) and Curb Radii

The primary purpose of bulb-outs is to shorten the distance that pedestrians must travel to cross a street. In addition, they may encourage motorists to drive slower by narrowing the travel lane and reducing vehicular speeds during turning movements at intersections. Motorists will travel more slowly around corners with smaller curb radii even without the use of curb extensions. Landscaping and other aesthetic treatments such as special paving textures should be carefully designed to avoid hazards to drivers and visually-impaired citizens while minimizing maintenance costs. Figure 6-15 shows an example image bulb-out placement to reduce curb radii and make an intersection more pedestrian-friendly.

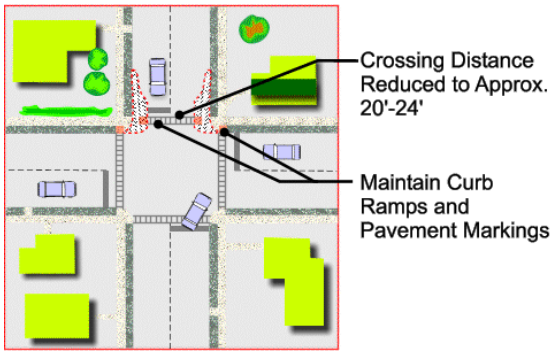


Figure 6-15. An example of bulb-out placement to reduce curb radii and shorten travel distance for pedestrians crossing at an intersection.

6.8.2. Medians and Refuge Islands

Figure 6-16 indicates the design and markings associated with refuge islands. Note that pavement markings delineate the approach to the islands; that the islands are "split" to allow for a level platform for wheelchair use; and that in cases where there are wide roads and high traffic volumes, a push-button pedestrian signal may be mounted in the refuge area to allow a pedestrian to split their trip into two halves as they cross the street. Note that the crosswalk on the right side of the diagram is configured at a skewed angle as it crosses the median. This allows pedestrians to have a better angle of sight as they approach and cross each side of the street. In all cases, a minimum 10-foot travel lane is maintained. Sensitivity to large vehicles (buses, trucks and fire equipment) dictates some elements of the median design, curb style, and placement. Median-controlled roadways reduce the number of turning conflicts and are generally preferred for both pedestrians and cyclists over a two-way, left-turn lane (TWLTL) roadway. Note that a refuge island is recommended in Section 8 as part of improvements for a pedestrian crossing at the intersection of US 17 and Church Street/Harvey Point Road.

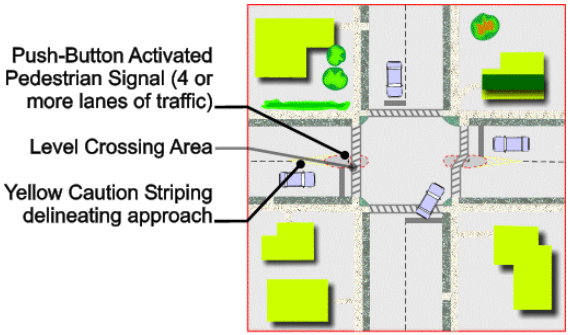


Figure 6-16. An example of well-designed median and refuge islands.

6.9. Summary

Pedestrian facility use is a function of a variety of factors, including the connectivity of the facilities, their safety, their convenience, and their comfort. For this reason, pedestrian facility design should be thoughtful and sensitive to the needs of its users. By following the guidelines provided in this section for sidewalk, crossing, and trail design, as well as other items associated with pedestrian facilities, Hertford should be able to create a built environment that will promote walking and increase the number of pedestrians in the Town.

[i] Vanguard Company, accessed November, 2005

(http://www.vanguardonline.com/downloads.asp)

[ii] United States Access Board, ADA Accessibility Guidelines Homepage, accessed November, 2005. (http://www.access-board.gov/adaag/html/adaag.htm#A4.29.2)

[iii] James W. Glock, Letter Correspondence to Regina McElroy, Director, FHWA Office of Transportation Operations, January 11, 2006.

[iv] *Manual on Uniform Traffic Control Devices for Streets and Highways*, 2003 Edition. Federal Highway Administration, 2003. Especially Sections 6B-1, 6D, 7, and Figures 6H-28, 6H-29, 7A-1, and 7B-4.

[v] *Planning and Designing Local Pedestrian Facilities*, North Carolina Department of Transportation Office of Bicycle and Pedestrian Transportation. February, 1997, Chapter 10.

[vi] Americans with Disabilities Act, US Code 28 CFR Part 36: ADA Standards for Accessible Design. Page 496 (www.usdoj.gov/crt/ada/adastd94.pdf).